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(54) Title: A GENE ENCODING VITAMIN B₆ PHOSPHATE PHOSPHATASE AND USE THEREOF

(57) Abstract: Disclosed is an isolated DNA encoding vitamin B₆ phosphate phosphatase selected from the group consisting of: (a) a DNA sequence represented in SEQ ID NO:9; (b) a DNA sequence which encodes a polypeptide having vitamin B₆ phosphate phosphatase activity and hybridizes under standard conditions to the DNA sequence defined in (a) or a fragment of thereof; (c) a DNA sequence which encodes a polypeptide having vitamin B₆ phosphate phosphatase activity, wherein said polypeptide is at least 70 % identical to the amino acid sequence represented in SEQ ID NO:10; (d) a DNA sequence which encodes a polypeptide having vitamin B₆ phosphate phosphatase activity and is at least 70 % identical to the DNA sequence represented in SEQ ID NO:9; (e) a degenerate DNA sequence of any one of (a) to (c).

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INTERNATIONAL SEARCH REPORT

International Application No
PCT 03/10575

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C12N15/55 C12N9/16 C12P17/12 C12N1/21

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C12N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

SEQUENCE SEARCH, EPO-Internal, WPI Data, PAJ, BIOSIS, EMBASE

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,X	WO 03 000875 A (ROCHE VITAMINS AG ;TAZOE MASAAKI (JP); HOSHINO TATSUO (JP); ICHIKA) 3 January 2003 (2003-01-03) page 8 -page 10; claims 1-15	3
A	DATABASE EBI 'Online! 5 July 2002 (2002-07-05) Database accession no. AL591783; AL591688 XP002275874 cited in the application abstract	
A	EP 0 950 715 A (HOFFMANN LA ROCHE) 20 October 1999 (1999-10-20) the whole document	
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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International Application No
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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>TAZOE M ET AL: "PRODUCTION OF VITAMIN B6 IN RHIZOBIUM" BIOSCIENCE BIOTECHNOLOGY BIOCHEMISTRY, JAPAN SOC. FOR BIOSCIENCE, BIOTECHNOLOGY AND AGROCHEM. TOKYO, JP, vol. 63, no. 8, August 1999 (1999-08), pages 1378-1382, XP008026955 ISSN: 0916-8451</p> <p>---</p>	
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A	<p>YANG YONG ET AL: "Involvement of the gapA- and epd (gapB)-encoded dehydrogenases in pyridoxal 5'-phosphate coenzyme biosynthesis in Escherichia coli K-12" JOURNAL OF BACTERIOLOGY, WASHINGTON, DC, US, vol. 180, no. 16, August 1998 (1998-08), pages 4294-4299, XP002266176 ISSN: 0021-9193</p> <p>-----</p>	

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